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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,434	01/12/2001	Dipak Shah	PETAP001	9950

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EXAMINER

NGUYEN, BRIAN D

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/759,434

Applicant(s)

SHAH ET AL.

Examiner

Brian D Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18, 35-48 and 50-60 is/are rejected.
- 7) ☒ Claim(s) 19-34 and 49 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4-5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 19-34 and 49 are objected to because of the following informalities:

Claim 19, line 12, it is suggested to change "the switching chips" to ---the switch chips---

In line 19, "the destination identifier" seems to refer back to "a destination indicator" in line 8.

If this is true, it is suggested to change "a destination indicator" in line 8 to ---a destination identifier---

Claim 25, line 3, it is suggested to change "the switching chips" to ---the switch chips---

Claim 33, line 2, it is suggested to change "the switching chip" to ---the switch chip---

Claim 49, line 14, it is suggested to change "the switching chip" to ---the switch chip---

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 23-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23 recites the limitation "the cells" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Raza (6,603,771).

Regarding claim 1, Raza discloses a switch system comprising a plurality of virtual queue managers that store data; and a plurality of switches, each being operatively connected to each of the switch circuits being connected to each of the queue managers, and at least one of the switch circuits having an internal scheduler, wherein he scheduler selects at least one of the queue managers to send data to the switch circuits (see figures 2 & 3; col. 2, lines 38-67).

Regarding claim 40, claim 40 has substantially all the limitation of claim 1, wherein the limitation: “at least one of said switch circuits having an internal scheduler” is replaced by the limitation: “each of said switch circuits including at least an internal scheduler” (see schedulers in figure 2).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-11, 50-60, and 41-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raza (6,603,771) in view of Chao et al (5,790,539).

Regarding claims 2-11, Raza discloses all the claimed subject matter except for explicitly disclose a cell of data and each block of data includes a header and a payload. However, These features are well known in the art. Chao discloses a cell, a header, and a payload (see ATM cell in the abstract). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the cell as taught by Chao in the system of Raza in order to transmit data through the switch.

Regarding claims 50-60, Raza discloses a method for switching a block of data comprising queues and scheduler (see figures 2 & 3; col. 2, lines 38-67). Raza does not specifically disclose header and payload. However, These features are well known in the art. Chao discloses a cell, a header, and a payload (see ATM cell in the abstract). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the cell as taught by Chao in the system of Raza in order to transmit data through the switch.

Regarding claims 41-48, claims 41-48 have substantially the same limitation as claims 2-11. Therefore, they are subject to the same rejection.

8. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raza (6,603,771) in view of Laor et al (6,147,996).

Regarding claims 12-14, Raza discloses a multiport concurrent switching apparatus comprising a switch fabric that can aggregate links and multiple switching chips without inter-chip scheduling communication between any of the multiple switching chips, thereby supporting

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higher switching bandwidth per port (see figures 2 & 3; col. 2, lines 38-67). Raza does not specifically disclose the apparatus is pipelined. However, this feature is well known in the art, Laor discloses this feature (see abstract). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the pipelined switching method as taught by Laor in the system of Raza in order to meet specific needs.

9. Claims 15-18 and 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raza (6,603,771) in view of Khacherian et al (6,542,507).

Regarding claims 15-18, Raze discloses a switching apparatus comprising: a plurality of queues for storing blocks of data, and a plurality of switches, at least one of the switches including a scheduler that arbitrates requests sent by the queues to the scheduler (see figures 2 & 3; col. 2, lines 38-67). Raza does not specifically disclose making a request and granting the request. However, requesting and granting the request is well known in the art. Khacherian discloses these features (see col. 4, lines 9-26). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to make a request and grant the request as taught by Khacherian in the system of Raza in order to control the transmission of data in the switch.

Regarding claims 35-39, Raze discloses a method for switching a block of data through a switching system, the switch comprising queues and scheduler (see figures 2 & 3; col. 2, lines 38-67). Raze does not specifically disclose payload; header; request and grant. However, these features are well known in the art. Khacherian discloses these features (see col. 4, lines 9-26). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the

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invention was made to make a request and grant the request as taught by Khacherian in the system of Raza in order to control the transmission of data in the switch.

Allowable Subject Matter

10. Claims 19-34 and 49 would be allowable if rewritten or amended to overcome the objection(s) and/or the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Nguyen whose telephone number is (703) 305-5133. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

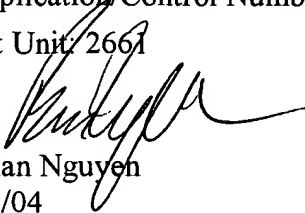
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Brian Nguyen
6/3/04